

Exponential Review
Test Tuesday

p444 q 1-6
p445 q 8-13
p446 q 1-7
+ Graphing Exponential Func- Handout

May 22-7:54 AM

Handout Review

$$y = a(x-h)^2 + k$$

$$y = -3(x-2)^2 + 3$$

$$y = 3^{x+2} + 6$$

May 22-7:59 AM

$$y = 2^x$$

$$y = 2^x - 6$$

$$y = 2^{x-3}$$

May 22-1:53 PM

$$y = 3(2^x)$$

$$y = -2(2^x)$$

$$y = \frac{1}{4}x$$

May 22-1:56 PM

Unit Review Handout

#5 $P(n) = P_0(1+r)^n$

$P(n)?$
 $P(1) = 250$
 $r = \text{doubles}/30 \text{ min} \quad ? \quad 1.00? \quad 1.0$
 $n = 8$

$$P(n) = 250(1+1)^8$$

$$= 250(2)^8$$

$$= 250(256)$$

$$= 64000$$

May 22-2:04 PM

Applications of Exponential Functions

#8 $P(n) = P_0(1+r)^n$

$P(n)?$
 $P(0) = 1000 = 1000(1+1.0)^{10}$
 $r = 1.0$
 $n = 10$

$$= 1000(2)^{10}$$

$$= 1024000$$

May 22-2:09 PM

$$\begin{aligned}
 & 200^{4/3} \\
 & = \sqrt[3]{200^4} \\
 & = \sqrt[3]{1.6000000000} \\
 & \approx 1169.6
 \end{aligned}$$

May 26-10:40 AM

$$\begin{aligned}
 3a) \quad P(n) &= 0.25g \\
 P(0) &= 1g \\
 r &= \frac{1}{2} = 0.50 \\
 n &= ? \\
 P(n) &= P(0)(1-r)^n \\
 0.25 &= 1(1-0.50)^n \\
 0.25 &= 1(0.50)^n \\
 0.25 &= 0.50^n \\
 \frac{0.25}{1} &= 0.50^n \\
 0.25 &= 0.50^n \\
 n &= 2 \\
 n &= 2 \times 140 \\
 &= 280d
 \end{aligned}$$

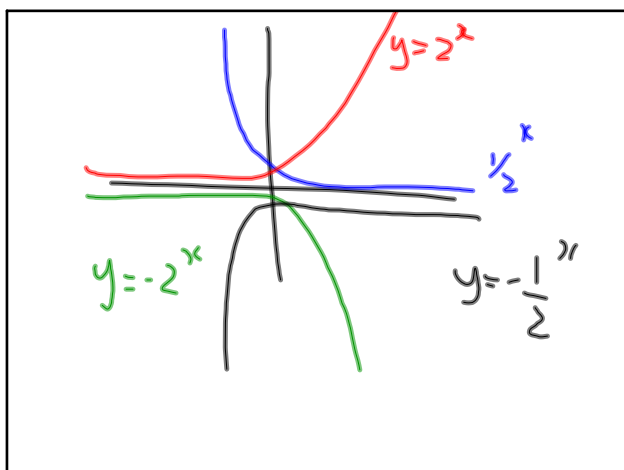
May 22-2:12 PM

$$\begin{aligned}
 9. \quad P(n) &= P_0(1+r)^n \\
 P_0 &= 1500 \\
 r &= \text{triples as a } \% \quad 200\% \\
 n &= \text{\# of times} \\
 2 \quad P(n) &= 1500(1+2.0)^n \\
 P(n) &= 1500(3)^n
 \end{aligned}$$

May 25-10:15 AM

$$\begin{aligned}
 & (10^1(10^3)^{-1})^{-2} \\
 & ((10^1)(10^{-3}))^{-2} \\
 & (10^{-2})^{-2} \\
 & (10)^4
 \end{aligned}$$

May 25-10:57 AM



May 26-10:51 AM

$$\begin{aligned}
 & 125^{1/3} \\
 & \sqrt[3]{125} = 5 \\
 & 0.25 \\
 & 81 \\
 & 81^{1/4} \\
 & \sqrt[4]{81} = 3
 \end{aligned}$$

May 26-11:42 AM